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Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons

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Note verbale dated 20 April 2018 from the Government of Japan to the Conference on Disarmament addressed to the Chair of the Committee

Working paper submitted by Japan

The Government of Japan presents its compliments to the Chair of the second session of the Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons and has the honour to transmit herewith the text of recommendations entitled "Building bridges to effective nuclear disarmament — recommendations for the 2020 review process of the Non-Proliferation Treaty", proposed by the Group of Eminent Persons for Substantive Advancement of Nuclear Disarmament (hereinafter referred to as "the Group") (see annex I), as well the document entitled "Chair's Summary: first and second meetings of the Group of Eminent Persons for Substantive Advancement of Nuclear Disarmament", produced by the Chair of the Group, Dr. Takashi Shiraishi (see annex II).

The Government of Japan further has the honour to advise that the Group was launched as an initiative of the Government of Japan in July 2017. The Group is an independent enterprise, composed of 16 members, who participate in personal capacities, from various countries of both nuclear-weapon States and non-nuclear-weapon States that are party to the Treaty on the Non-Proliferation of Nuclear Weapons. On 29 March 2018, the Group presented the text of recommendations to Minister for Foreign Affairs of Japan, Taro Kono, in Tokyo, as the outcome document of the activities of the Group.

The Government of Japan believes that the recommendations, which attempt to converge different approaches on nuclear disarmament, could be a meaningful reference for the international community and requests that the present texts be circulated as a working paper of the second session of the 2020 Preparatory Committee.

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Annex I

Building bridges to effective nuclear disarmament

Recommendations for the 2020 Review Process for the Treaty on the Non-Proliferation of Nuclear Weapons

Group of Eminent Persons for Substantive Advancement of Nuclear Disarmament

I. In search of a common goal for a divided world

1. The vision for a world without nuclear weapons has become blurred and needs to be refocused. Two opposing trends in disarmament have come into sharper relief. Deepening concerns over the deteriorating strategic environment impel some States to reaffirm reliance on nuclear deterrence in the belief that nuclear deterrence benefits national and international security and stability and prevents a major war. At the same time, other States and civil society groups, including *hibakusha*, seek the total elimination of nuclear weapons without further delay, on the basis of deep concerns about the risks of catastrophic humanitarian consequences of nuclear use, as reflected in the adoption of the Treaty on the Prohibition of Nuclear Weapons. This divide has deepened and become so stark that States with divergent views have been unable to engage meaningfully with each other on key issues.

2. The Group of Eminent Persons strongly believes that the stalemate over nuclear disarmament is not tenable. Whatever the disagreements expressed by States regarding the Non-Proliferation Treaty process and the Treaty on the Prohibition of Nuclear Weapons, it is not in any State's interest to allow the foundation of the global nuclear order to crumble. Rather, it is a common interest of all States to improve the international security environment and pursue a world without nuclear weapons in line with article VI of the Non-Proliferation Treaty. The international community must move urgently to narrow and ultimately resolve its differences. Civility in discourse and respect for divergent views must be restored to facilitate a joint search for a common ground for dialogue, where all parties, even though they might have different perspectives, can work together to reduce nuclear dangers.

3. Against this backdrop, the Group recommends that States should, with a sense of urgency, undertake the bridge-building measures prescribed in part II. This is necessary to re-energize nuclear disarmament and non-proliferation during this cycle of the Non-Proliferation Treaty review process, enhance the process itself and lay the ground for converging different approaches.

Premises for upholding the nuclear non-proliferation and disarmament regime

4. The norm of non-use of nuclear weapons, which is backed by the 73-year practice of non-use, must be maintained by all means.

5. The Non-Proliferation Treaty remains central to advancing our common goal of a world without nuclear weapons.

6. To preserve the Non-Proliferation Treaty, all States parties should fulfil their joint commitment to the ultimate total elimination of nuclear weapons, and to the implementation of the decisions on principles and objectives and strengthening the review process of 1995 and the Final Documents of 2000 and 2010. On the basis of

the resolution adopted in 1995 and the Action Plan agreed in 2010, the concerned regional actors and the co-sponsors/conveners — the Russian Federation, the United Kingdom, and the United States — in close communication with interested States parties to the Non-Proliferation Treaty and the United Nations, should work to convene as soon as possible a conference on the Middle East zone free of nuclear weapons and other weapons of mass destruction to be attended by all States of the region of the Middle East.

7. The Comprehensive Nuclear-Test-Ban Treaty plays a critical role in reinforcing the norm of non-testing, preventing nuclear proliferation and contributing to nuclear disarmament. The Group urges the remaining Annex II States to sign and/or ratify the treaty without further delay and calls upon all States to refrain from nuclear testing. All States should make extra efforts to maintain the effectiveness of the treaty's verification mechanisms and the Provisional Technical Secretariat and ensure adequate funding.

8. The Russia-United States nuclear arms control framework constitutes a fundamental basis for the global nuclear arms and threat reduction effort. The Group urges the Russian Federation and the United States to spare no effort to re-engage and to rehabilitate the framework to secure further reductions in nuclear forces. The most urgent task is the extension of the New Strategic Arms Reduction Treaty (New START) for five years.

9. Full compliance by all parties with all elements of the Joint Comprehensive Plan of Action (JCPOA) is essential to the integrity of the nuclear non-proliferation regime. All stakeholders should continue to support full implementation of the Plan of Action, which is underpinned by Security Council resolution 2231 (2015).

10. Catastrophic consequences from the Democratic People's Republic of Korea nuclear and missile crisis must be prevented. All stakeholders are urged to make every effort to resolve the problems through peaceful means, and to achieve the complete, verifiable and irreversible denuclearization of the Korean Peninsula.

II. Bridge-building actions

11. A range of activities to build bridges across the nuclear disarmament divide should be designed to yield a clear common vision for achieving a world without nuclear weapons. "Bridge builders" should consider developing an agenda that requires diverse States to openly address the fundamental issues and questions that create the divide, so that possible pathways to common ground can be identified and concrete effective steps toward nuclear disarmament can be taken. In particular, despite their diverging approaches to achieving nuclear disarmament, the common commitment of nuclear-weapon States and non-nuclear-weapon States to the objective of the Non-Proliferation Treaty offers a useful point of departure for bridge building. The Group recommends the following actions with the recognition that Governments along with civil society organizations can jointly play effective roles.

Enhancing the implementation of the Non-Proliferation Treaty review process

12. All Non-Proliferation Treaty States parties should demonstrate ownership of their treaty — in statements but also by making concrete and practical suggestions. These could be unconditional voluntary actions, reports on treaty implementation and bridge-building proposals that demonstrate States' commitments during the review cycle.

13. National reports can be better utilized in the Non-Proliferation Treaty strengthened review process. In particular, it would be useful to convene a session at the third meeting of the Preparatory Committee, at which nuclear-weapon States explain their national reports, followed by an interactive discussion with other States parties and civil society participants. Information on steps towards nuclear disarmament envisaged by the nuclear-weapon States in the step-by-step approach would be helpful.

14. "Bridge builders" could take initiatives in fostering a dialogue, involving both nuclear-armed States and non-nuclear-weapon States, to improve understanding of and develop enhanced transparency measures intended to: (a) contribute effectively to threat reduction and risk reduction; (b) address security concerns incurred during the process of nuclear disarmament; and (c) improve confidence and trust among all types of States — nuclear-armed States, States under extended nuclear deterrence and proponent States of the Treaty on the Prohibition of Nuclear Weapons. The dialogue could address relevant issues, such as concrete measures for reduction, transparency about doctrine and the policy dimensions of nuclear arsenals, through interactive discussions rather than repetitive statements. In addition, the dialogue should review the content, format, and cost of national reports.

Confidence-building measures as a foundation for bridge building

15. Nuclear-armed States, in cooperation with States under extended nuclear deterrence arrangements, should find ways to reduce the role of nuclear weapons in national security policies.

16. Nuclear-weapon States should strengthen negative security assurance commitments enshrined in Security Council resolution 984 (1995) to Non-Proliferation Treaty non-nuclear-weapon States and States parties to treaties on nuclear-weapon-free zones. Those who are not able to do so should explain why. Nuclear-weapon States also should consider how to best utilize declaratory policies for confidence-building, including suggesting ways that would allow more empirical assessments that stated declaratory policies are actually operative.

Preparing the ground for convergence of different approaches

(a) Identifying elements of nuclear disarmament

17. There currently exists no widely shared understanding of what security-enhancing, verifiable and enforceable nuclear disarmament should entail. The international community will not be able to decide on and implement nuclear disarmament without more clarity on what it will require. States that rely on nuclear deterrence — directly or through alliances — and States that support immediate prohibition should take up this challenge in the Non-Proliferation Treaty process as well as through other forums.

(b) Intensifying efforts to develop monitoring, verification and compliance mechanisms

18. Development of effective monitoring, verification and compliance mechanisms is necessary for the achievement of nuclear disarmament. The process of developing such means should in itself help build confidence among nuclear-armed States and between nuclear-armed States and non-nuclear-weapon States.

19. Several initiatives are currently being undertaken by individual States and groups of States, including nuclear-weapon States and non-nuclear-weapon States, to investigate technologies, techniques and methodologies to ensure effective monitoring and verification of nuclear disarmament. Reliable, cost-effective technologies that provide a high level of confidence without disclosure of sensitive information to non-nuclear-weapon States should be the goal. Current efforts should be continued and afforded the necessary resources. Ideally, there should be collaboration among current initiatives to help accelerate progress, with regular reports to the Non-Proliferation Treaty review process. All States should begin to consider how they might contribute to monitoring and verification.

20. A technical study under the auspices of the United Nations should be undertaken that would ascertain the possibility of conducting verification activities without disclosure of sensitive information (such disclosure would run counter to the provisions of articles I and II of the Non-Proliferation Treaty) and lay the ground for further efforts to develop nuclear disarmament verification mechanisms involving all interested Non-Proliferation Treaty States parties.

21. An even greater challenge than ensuring effective monitoring and verification is to design and agree on measures to ensure compliance by States with their legally binding obligations, including the use of enforcement measures, when non-compliance occurs. Among the worst-case scenarios that must be confronted is the "breakout" of a State from a nuclear-weapon-free world by acquiring a nuclear weapon or weapons. To give all States the confidence that nuclear disarmament will be effective and durable, agreed mechanisms must be created to ensure timely enforcement. Research into this relatively neglected but vital subject should be accelerated both by Governments and civil society and results shared in the Non-Proliferation Treaty review process.

22. The control of weapons-usable fissile material — highly enriched uranium and weapons-usable plutonium — is both a near-term imperative and a prerequisite for disarmament. States are encouraged to end production of fissile material for nuclear weapons; those that continue to produce such material are encouraged to clarify what prevents them from stopping.

23. In this regard, all States should:

(a) Ensure the highest standards of physical protection and security for existing stocks of such material;

(b) Work cooperatively to develop widely accepted techniques for the irreversible and verifiable disposition of excess ex-weapons fissile material.

24. A world free of nuclear weapons will require an agreed, legally binding global regime that regulates production, provides verifiable accounting of existing material, provides adequate safeguards against its use in nuclear weapons and disposes of it in an irreversible and verifiable manner. This regime should include effective provisions to ensure that highly enriched uranium used in nuclear-powered warships or for civilian uses cannot be diverted to weapons use. All States possessing highly enriched uranium or weapon-usable plutonium should work towards developing the characteristics of such a regime.

(c) Setting a nuclear disarmament agenda that addresses hard questions about the relationship between security and disarmament

25. There are fundamental differences within and between States regarding the utility of nuclear deterrence. The existence of these differences needs to be accepted and addressed constructively if they are then to be reconciled in a way that will make the elimination of nuclear arsenals possible. Proponents and opponents of nuclear

deterrence must persist in bridging their differences. Although nuclear deterrence may arguably enhance stability in certain environments, it is a dangerous long-term basis for global security, and therefore all States should seek a better long-term solution.

26. Meanwhile, all States should:

(a) Reaffirm the understanding that nuclear war cannot be won and should never be fought;

(b) Restore civility in discourse, without which there is no cooperation.

27. In addition, nuclear-armed States should:

(a) Eschew any nuclear war-fighting doctrine;

(b) Refrain from coercive action based on the threat of use of nuclear weapons.

28. "Bridge builders" should launch honest dialogue that:

(a) Seeks to design a disarmament process or framework with effective measures and benchmarks;

(b) Aims to establish common ground for all States by setting an agenda comprised of hard questions that: (a) address the right of self-defence, which under extreme circumstances of national survival could envisage the possibility of limited threat of use or use of nuclear weapons, mindful of international humanitarian law, taking into account the humanitarian consequences of nuclear weapons and protection of civilians, non-combatants and the environment; and (b) ensure that human security is considered in designing a world free of nuclear weapons, while preserving international peace and security; and

(c) Seeks solutions to the ultimate dilemma facing nuclear disarmament: how to guarantee the security of all States by ensuring compliance with the obligations under such a regime, including timely enforcement when other measures fail to achieve compliance.

Group of Eminent Persons for Substantive Advancement of Nuclear Disarmament
Member list

Takashi Shiraishi (Chair)	President, Institute of the Asian Economic Studies, Japan External Trade Organization
Setsuko Aoki	Professor, Keio University
Masahiko Asada	Professor, Kyoto University
Linton F. Brooks	Former Administrator, National Nuclear Security Administration
Tim Caughley	Non-Resident Senior Fellow, UNIDIR
Trevor Findlay	Senior Research Fellow, Department of Social and Political Sciences, Faculty of Arts, University of Melbourne
Angela Kane	Former United Nations High Representative for Disarmament Affairs
Mahmoud Karem	Former Ambassador of Egypt to Japan, former member of the United Nations Secretary-General's Advisory Board on Disarmament Matters
Anton Khlopkov	Director of Center for Energy and Security Studies
Yasuyoshi Komizo	Chairperson, Hiroshima Peace Culture Foundation
George Perkovich	Ken Olivier and Angela Nomellini Chair/Vice President for Studies, Carnegie Endowment for International Peace
Tariq Rauf	Former Head of Verification and Security Policy Coordination Office, International Atomic Energy Agency
Shen Dingli	Professor and Associate Dean, Institute of International Studies, Fudan University
Bruno Tertrais	Deputy Director, Foundation for Strategic Research
Masao Tomonaga	Honorary Director, Japan Red Cross Atomic Bomb Hospital in Nagasaki
Noboru Yamaguchi	Vice-President, International University of Japan/ Advisor, The Sasakawa Peace Foundation

Note: Ambassador Dr. Mahmoud Karem was not able to participate in the second meeting owing to official affairs. Given to his absence at the finalizing process, he is not fully associated with this recommendation. However, his general agreement to this recommendation remains within his intention to participate in the next round of the meeting in the Japanese fiscal year 2018.

Annex II

Chair's Summary*

First and Second Meetings of the Group of Eminent Persons for Substantive Advancement of Nuclear Disarmament

March 2018

I. Purpose of the Group and report

1. The Group of Eminent Persons for Substantive Advancement of Nuclear Disarmament was established under the initiative of former Foreign Minister Fumio Kishida and announced at the first session of the Preparatory Committee for the 2020 Review Conference of the Parties to the Nuclear Non-Proliferation Treaty, held in Vienna in May 2017. The context for establishment of the Group is, among other issues, deterioration of the international security and nuclear policy environments, especially due to the crisis provoked by the Democratic People's Republic of Korea nuclear weapons programme, and the widening of serious schisms on approaches towards achieving a world without nuclear weapons between nuclear-weapon States and non-nuclear-weapon States, as well as among non-nuclear-weapon States.

2. The mandate of the Group is to submit to the Foreign Minister of Japan policy recommendations on concrete measures for the substantive and effective advancement of nuclear disarmament. The Government of Japan will introduce these recommendations into the Non-Proliferation Treaty preparatory meetings leading up to the 2020 Review Conference, and will urge the international community to implement the Group's suggested measures. Members of the Group participated in the discussions in their personal capacities and do not represent any specific organizations or countries.

3. The work of the Group will be implemented in two phases. In Phase I, the Group produced recommendations by March 2018 for input by representative of the Government of Japan to the second session of the Preparatory Committee for the 2020 Review Conference, to be held in late April 2018. In Phase II, the Group will make further recommendations for the 2020–2025 Non-Proliferation Treaty review cycle and beyond, which will be presented at the third session of the Preparatory Committee in Spring 2019.

4. The Group developed policy recommendations in Phase I that focus on urgent and immediate activities to build bridges across the nuclear disarmament divide. Among these are: (a) enhancing the implementation of the Non-Proliferation Treaty review process; (b) implementing confidence-building measures as foundations for bridge-building; and (c) creating the ground for converging different approaches. The last part includes three efforts: identifying elements of nuclear disarmament; intensifying efforts to develop nuclear disarmament monitoring, verification and compliance mechanisms; and setting a nuclear disarmament agenda that addresses hard questions about the relationship between security and disarmament.

* The chair's summary, prepared under his own authority and responsibility, outlines his understanding of the discussions at the first and second meetings of the Group of Eminent Persons for the Substantive Advancement of Nuclear Disarmament, held in Hiroshima and Tokyo in November 2017 and March 2018, respectively. The chair's summary constitutes neither a consensus document nor recommendations of the Group.

II. State of play

5. Despite frequently reiterated commitments to achieve total elimination of nuclear weapons by literally all countries, including nuclear-armed States, progress toward nuclear disarmament has stalled. Although there are some positive and important aspects of the current situation, notably the continued non-use of nuclear weapons for more than 70 years after the atomic bombings of Hiroshima and Nagasaki in August 1945, nuclear disarmament efforts have been hampered by both acute and chronic problems that have intensified in the past several years.

A. Acute problems

1. Democratic People's Republic of Korea

6. The most immediate and serious crisis confronting regional and international security, nuclear disarmament and non-proliferation — and which risks breaking the tradition of non-use of nuclear weapons — is caused by development by the Democratic People's Republic of Korea of nuclear weapons and ballistic missiles. The long-running challenges raised by the declared withdrawals of the Democratic People's Republic of Korea from the Non-Proliferation Treaty in 1993 and 2003 have worsened considerably in the last couple years. Through frequent and alarming tests, the Democratic People's Republic of Korea has bolstered its nuclear and ballistic missile capabilities aggressively and rapidly. The Democratic People's Republic of Korea repeatedly threatens to use nuclear weapons (even pre-emptively) against Japan, the United States and the Republic of Korea. There is a worrying possibility of tensions, with the Democratic People's Republic of Korea escalating to the nuclear level, either deliberately or by miscalculation or accident. Deterrence or other means to avoid such escalation might not work to prevent the actual use of nuclear weapons in the future. Some experts also warn of the possibility of a domino effect, in which concerned countries in the region and beyond might alter their security and nuclear-related policies depending on how the Democratic People's Republic of Korea issue evolves.

2. United States-Russia

7. Amidst deteriorating bilateral relations, the erosion of United States-Russian nuclear arms control cooperation presents another immediate, serious concern with important ramifications for the overall nuclear disarmament architecture. Washington and Moscow have each accused the other of violating the Intermediate-Range Nuclear Forces Treaty. Unless and until they resolve this issue, prospects look dim for further reductions in strategic and non-strategic nuclear weapons, below the limits established under the new Strategic Arms Reduction Treaty (START). The lack of momentum and political will for deeper cuts in United States and Russian nuclear weapons is complicated by concerns that third countries may attempt to achieve strategic parity or offset nuclear forces with ballistic missile defence technology, conventional hypersonic strike weapons or other emerging technologies.

3. Geopolitical competition

8. Geopolitical competition along with ongoing power transitions, especially in North-East and South Asia, Europe and the Middle East, cast doubts on the prospects for promoting nuclear disarmament and non-proliferation from several directions. Several concerned countries have re-evaluated the role of (extended) nuclear deterrence in addressing perceived security challenges. Nuclear-armed States continue to modernize their nuclear arsenals, aiming to maintain and/or bolster

nuclear deterrence. Such activities in these States reflect beliefs that nuclear weapons remain crucial to deterring major aggression, to protecting national security, and as a guarantor of peace. According to these beliefs, States would more likely face aggression if they relinquished nuclear weapons, and conventional forces alone might not be sufficient to deter or defeat aggression. Countries whose security policy involves nuclear deterrence have become more cautious about the potential negative implications of nuclear disarmament efforts on their nuclear deterrence practices.

B. Chronic problems

1. Multilateral nuclear arms control

9. Nuclear disarmament efforts face a chronic standstill. The Comprehensive Nuclear-Test-Ban Treaty, concluded in 1996, has yet to enter into force. Formal substantive negotiation on a fissile material cut-off treaty) has not commenced at the Conference on Disarmament. Outside of the Conference, there have been very few meaningful multilateral nuclear disarmament initiatives in which nuclear-armed States have been involved.

2. Roles of nuclear weapons

10. Nuclear-armed States (and their allies, to a lesser extent) continue to attach importance to nuclear weapons for, inter alia: deterring an adversary's use of nuclear weapons (and, for some countries, other weapons of mass destruction and conventional weapons); preventing large-scale warfare among major powers (or nuclear-armed States); stabilizing major-power relations through mutual deterrence; offsetting an adversary's perceived superior military capabilities; and preserving status and prestige as a major power. Accordingly, nuclear-armed States' perceptions of the value of nuclear deterrence and the status and prestige derived from nuclear weapons remain as potential temptation for further nuclear proliferation.

3. Non-proliferation Treaty

11. The Non-Proliferation Treaty — the cornerstone of the international nuclear non-proliferation regime — and its review process are now facing great challenges. Among others, non-nuclear-weapon States have been frustrated by perceived inadequate implementation of article VI of the Non-Proliferation Treaty by nuclear-weapon States. In this context, non-nuclear-weapon States question what should constitute "meaningful measures" toward disarmament under the Treaty. Some non-nuclear-weapon States note that none of the five nuclear-weapon States have ever carried out nuclear force reductions expressly for the purpose of implementing article VI; rather, such reductions have been driven by national security considerations and not by fealty to the disarmament provisions contained in the Non-Proliferation Treaty.

12. Another outstanding challenge is the lack of universality of the Non-Proliferation Treaty. India, Israel and Pakistan refused to join the Non-Proliferation Treaty. Meaningful discussions on disarmament require the participation of all three countries, but their non-membership means that this is not possible in the current Non-Proliferation Treaty context.

13. In addition, the Non-Proliferation Treaty review process suffers from institutional fatigue. Among the contributing factors is inadequate implementation and marginal progress on previously made consensus commitments on nuclear disarmament (i.e., the 13 steps agreed in 2000 and the 2010 Action Plan) following strenuous efforts at prior review conferences. Even reviews on implementation of these measures have not been conducted adequately. Discussions of article VI and other provisions have become sterile and repetitive. Furthermore, many countries and

civil society groups have seemingly become indifferent to the review process; instead, only a few States devote high-level attention to the reviews. This contributes to a vicious cycle that decreases the value of the review process, in which some States demonstrate incomplete understanding of the Treaty and inadequate preparation for its review process, which then hampers their ability to negotiate in real time or take part in interactive discussions.

C. Gap

14. Persistent stalemate and erosion of progress toward nuclear disarmament have widened a gap between nuclear-armed States and non-nuclear-weapon States and among non-nuclear-weapon States. In the Group's discussions, this divide was also characterized by the use of the terms "disarmers", who favour the immediate prohibition and abolition of nuclear weapons, and "deterrers", who favour retaining nuclear deterrence.[1]

15. The divide between disarmers and deterrers results from different perspectives regarding nuclear weapons, or lack of understanding between the two groups regarding, inter alia, geostrategic circumstances and divergent ways to improve global security. Deterrers argue for the necessity of maintaining nuclear deterrence for their national security. They perceive that nuclear weapons and nuclear deterrence play essential roles for maintaining national security and stability and preventing major-power conflict. Disarmers, on the other hand, mostly disagree with the argument that stability can be best achieved through a nuclear "balance of terror." Instead, they insist that the continued existence of nuclear weapons threatens tremendous humanitarian consequences. They also argue that nuclear-armed States and their allies — who mostly argue for following a step-by-step or progressive approach to disarmament — should explain their approach more concretely; how to define the steps and the corresponding measures needed to reach them.

1. Humanitarian dimensions

16. The divide is also seen in debates over humanitarian dimensions of nuclear weapons. Disarmers and some deterrers, to an extent, recognize the humanitarian implications of continued possession of nuclear weapons. However, disarmers criticize deterrers for attaching less importance to, or giving insufficient recognition to, humanitarian dimensions, and for refusing to accept a norm that delegitimizes the use or threat of use of nuclear weapons. For disarmers, humanitarian norms are gaining more prominence on the basis of fears that an erratic, miscalculated decision, or misguided leadership, may lead to crisis, escalation, or war resulting in devastating impact on humanity. In this view, the survival of humanity requires that nuclear weapons never be used under any circumstances and should be eliminated.

2. Treaty on the Prohibition of Nuclear Weapons

17. On the basis of these perceptions, States and civil society groups supporting nuclear disarmament took the initiative to establish the Treaty on the Prohibition of Nuclear Weapons, concluded in July 2017. The Treaty stipulates a total ban on nuclear weapons and their related activities by signatory States. Proponents argue that the Treaty on the Prohibition of Nuclear Weapons, which highlights international concerns about the potential disastrous humanitarian and environmental consequences of nuclear war, is itself an essential plank in the platform for

[1] How to define "disarmers" and "deterrers," as well as whether to use these terms, were not agreed by the members, but are used in this chair's summary for the purpose of convenience to clarify the points of discussions.

elimination of nuclear weapons, and will increase awareness of the humanitarian dimensions of nuclear weapons, thereby enhancing a prohibition norm. For proponents, the initiative to conclude the Treaty on the Prohibition of Nuclear Weapons was an expression of unwillingness to be blocked in venues where progress toward disarmament is currently being frustrated by nuclear-armed States. The Treaty also demonstrates the political costs of the nuclear-armed States' failure to live up to their Non-Proliferation Treaty commitments regarding disarmament, and challenges the notion that nuclear weapons are acceptable armaments.

18. Opponents criticize the conclusion of the Treaty on the Prohibition of Nuclear Weapons. They insist that it will not be effective in eliminating nuclear weapons precisely because the nuclear-armed States refused to participate or sign the Treaty. Opponents also argue that the leading governmental and nongovernmental advocates of the Treaty on the Prohibition of Nuclear Weapons do not address the security issues which drive nuclear-armed States and their allies to rely on nuclear deterrence. Furthermore, they criticize the Treaty for eliding how nuclear disarmament should be verified and enforced, most serious and complicated issues that must be resolved if nuclear disarmament is actually to be pursued.

19. Opponents of the Treaty on the Prohibition of Nuclear Weapons warn that the Treaty risks neglect of the Non-Proliferation Treaty and its review process, possibly leading to the delegitimization of the foundation of the international non-proliferation regime. Proponents, on the other hand, argue that the Treaty on the Prohibition of Nuclear Weapons is not a cause but a symptom of the gap between nuclear-weapons States and non-nuclear-weapons States that has already been "institutionalized" in the Non-Proliferation Treaty and has widened for over a decade owing to inadequate implementation of nuclear disarmament obligations/commitments by nuclear-armed States. Thus, the Treaty on the Prohibition of Nuclear Weapons negotiation process and conclusion highlights how deep the gap between these two groups has become and has, at the same time, widened the gap further.

III. Agenda for work

20. In their discussions, the Group contemplated and discussed an agenda for work toward a world without nuclear weapons comprised of the following steps: first, reversing current negative trends by taking (even small) concrete measures; second, simultaneously and/or following efforts to reverse negative trends, formulating and beginning to implement nuclear disarmament measures, targeted at, for instance, a so-called minimization point; and third, establishing a common vision for global security without nuclear weapons. The second and third steps, including hard questions (see para. 40), will be discussed mainly in the next round of Group meetings held in the Japanese fiscal year 2018 (starting from April 2018 through March 2019).

A. Short term: reversing negative trends

21. Although the current situation surrounding nuclear disarmament cannot be solved or remedied in the short term, it is imperative to arrest further deterioration in the nuclear environment and to foster political will to cultivate common ground.

1. Democratic People's Republic of Korea

22. Addressing the dangerous nuclear weapons and missile development by the Democratic People's Republic of Korea is the top priority among short-term efforts to reverse negative trends in regional/international security, as well as nuclear disarmament. The uncompromisable goal, which might not be realized in the short

term, is to achieve the complete, verifiable and irreversible dismantlement of the nuclear weapons programme of the Democratic People's Republic of Korea. The Democratic People's Republic of Korea cannot and should not be granted either de jure or de facto status as a nuclear-weapon State.

23. Despite recent positive developments, namely the announcement of an inter-Korean as well as a United States-Democratic People's Republic of Korea summit, it is still difficult to find a way of reversing the nuclear weapons programme of the Democratic People's Republic of Korea. Neither diplomacy nor political and economic pressure, mounted over decades, have led Pyongyang to renounce its nuclear programme. Removing the nuclear arsenal through military means or by forcibly changing the regime are not viable options given the possibility of devastating damage that the Republic of Korea and Japan would suffer from retaliation by the Democratic People's Republic of Korea, including potentially with nuclear weapons. Relevant States confronting Democratic People's Republic of Korea nuclear threats must urgently act to both prevent further deterioration of the situation and configure a policy consisting of engagement, sanctions, pressure, deterrence and containment, while also taking first steps toward a solution.

2. United States-Russia

24. The Russian Federation and the United States, as two nuclear superpowers, bear special responsibility for advancing nuclear disarmament. In spite of — indeed because of — deterioration in the United States-Russia relationship, they should make extraordinary efforts to maintain the bilateral nuclear arms control architecture. An important step in this regard is for both parties to agree a five-year extension of New START and to resolve issues regarding compliance with the Intermediate-Range Nuclear Forces Treaty. Establishing regular bilateral dialogues on nuclear arms control, disarmament and strategic stability is critical to facilitating these efforts and could also establish a basis for future negotiations on further reductions of strategic and non-strategic nuclear arsenals.

3. Dialogues

25. The Group underscored the importance of dialogue between disarmers and deterrers for easing current tensions, narrowing perception gaps, finding middle ground and promoting cooperation on nuclear disarmament. Political leaders and a wide range of civil society actors need not only to acknowledge the differences that divide the groups, but also to seek common goals and values through collaboration and cooperation.

26. Meanwhile, to revitalize meaningful dialogue on nuclear disarmament, both immediately and enduringly, the international community needs to renew its commitment to achieve a world without nuclear weapons. The following issues could be included in statements of renewed commitment, which not all nuclear weapon-possessing States have made clear: nuclear war must never be fought and cannot be won; nuclear weapons are only weapons of deterrence and not for war fighting; the use of nuclear weapons can be considered only in extreme circumstances; and international humanitarian law will be respected in all circumstances.

4. Transparency and confidence-building measures

27. To help facilitate promotion of nuclear disarmament, transparency and confidence-building measures could be pursued alongside dialogues.

28. Transparency measures can provide a baseline for promoting nuclear disarmament. Enhancing the types and scope of information that exists about each State's nuclear weapons can facilitate more effective action to bridge the divide. It is

unrealistic to expect full transparency, for example on the numbers and deployment status of nuclear weapons, given concerns that such information could decrease the effects of nuclear deterrence. However, transparency in strategy and doctrine — that is, how States think about nuclear weapons and why they think they need to possess them — is essential. To the extent possible, transparency in numbers, capabilities, deployments and modernization plans for nuclear arsenals should also be increased in this context.

29. Transparency and confidence-building measures can also help States to manage risks of deliberate, accidental, inadvertent or unintended nuclear escalation. Nuclear-armed States could usefully negotiate such measures for promoting multilateral nuclear threat reduction cooperation, for example. Transparency and confidence-building measures should also be contemplated in the context of the establishment of the Treaty on the Prohibition of Nuclear Weapons, aiming to reduce the possibility that nuclear weapons will be used and that such use would result in catastrophic humanitarian consequences.

5. Non-Proliferation Treaty

30. Efforts to mitigate potential damage to the Non-Proliferation Treaty are needed in advance of the 2020 Review Conference. There are two important questions in this regard: how to use the review cycle to strengthen the Non-Proliferation Treaty; and which issues should be prioritized in the lead-up to the Review Conference. Such priorities would include: issues regarding nuclear disarmament; the prospects for convening a conference on a Middle East zone free of nuclear weapons and other weapons of mass destruction and their delivery vehicles; the situation on the Korean Peninsula; and preservation of and compliance with the Joint Comprehensive Plan of Action, which resolved the crisis over the nuclear programme of the Islamic Republic of Iran. A spirit of compromise and understanding is essential if Non-Proliferation Treaty States parties are to ensure a productive 2020 Review Conference.

31. It will be impossible to avoid issues related to the Treaty on the Prohibition of Nuclear Weapons in the second and third Non-Proliferation Treaty Preparatory Committee meetings and the Review Conference. Hypothetically, although unlikely, some Non-Proliferation Treaty parties may become increasingly dissatisfied with the pace of progress on nuclear disarmament and decide to withdraw from the Treaty. A more likely risk is that, once the Treaty on the Prohibition of Nuclear Weapons enters into force, some non-nuclear-weapon States party to the Non-Proliferation Treaty shift their attention from the Non-Proliferation Treaty to the Treaty on the Prohibition of Nuclear Weapons, further weakening the Non-Proliferation Treaty review process.

B. Midterm: pursuing a common vision

1. Minimization point

32. One of the important tasks for the Group is to re-evaluate the concept of a nuclear disarmament "minimization point," which the Government of Japan has advocated for several years. The International Commission on Nuclear Non-Proliferation and Disarmament characterized the minimization point as one consisting of very low numbers of nuclear warheads (less than 10 per cent of the nuclear arsenals that existed in 2005); adoption of "no first use" doctrines; and implementation of force deployments and alert statuses reflecting that doctrine.

33. To clarify the concept and to make it more valuable in promoting nuclear disarmament, the Group discussed several issues regarding the numbers and roles of nuclear weapons that could be considered as a minimum level, including:

(a) Whether the number of nuclear weapons matters (quantitative minimization), or whether it is more important that the roles and objectives served by nuclear weapons are reduced (qualitative minimization);

(b) How many nuclear weapons would be regarded as necessary or acceptable to credibly maintain a minimum deterrent; and whether the numbers could be tailored to the individual nuclear-armed States;

(c) To what extent and how the importance given to nuclear weapons could be minimized and the roles that nuclear weapons play in international security issues could be narrowed;

(d) What would constitute a "minimized role" for nuclear weapons in concrete terms: for example, whether it would involve precluding nuclear counterforce options or giving up conventional military targeting entirely;

(e) How the relationship between a quantitative and/or qualitative minimization point and deterrence can be defined:

(i) Whether nuclear-armed States would also need to have more accurate and reliable weapons should they proceed to a certain "minimization point." If so, whether that would mean acceptance of certain modernization programmes, which are not usually welcomed by disarmers;

(ii) How States that have chosen to maintain extended nuclear deterrence could maintain confidence in their security during work on this process;

(iii) What it means for missile defence systems; specifically, whether more missile defences would be needed in order to limit potential damage, or fewer missile defences to ensure that one's adversaries would need fewer nuclear weapons for credible deterrence;

(f) Whether minimum deterrence can be achieved compatible with the objective of minimizing the risk of humanitarian disaster. If one tries to define a minimization point in connection with avoidance of humanitarian disaster at a global level, it could result in a new logic that has not been considered before;

(g) How enforcement of nuclear disarmament can be implemented if a State attempts to exceed or break out from the minimization point.

34. A minimization point may be perceived as a risky term or concept. For those who regard the process of nuclear disarmament since the Non-Proliferation Treaty entered into force as too slow, "minimization" could connote an "acceptable" minimum arsenal level. Nuclear-armed States, on the other hand, could attempt to use this concept as a way to avoid deep reductions in the numbers and roles of nuclear weapons, arguing that that the current level is a minimization point for them. The potential limitations of this concept should be considered by the Group.

2. Multilateral nuclear disarmament

35. In pursuit of a minimization point, multilateral nuclear disarmament should be reinvigorated as one of the most important midterm efforts.

36. The Comprehensive Nuclear-Test-Ban Treaty, which has yet to enter into force, is one of the most important pillars of tangible progress toward nuclear disarmament. Considering that the Treaty remains not yet in force, the Group contemplated measures that could further advance the objectives of the Treaty and reinforce the non-testing norm. According to article 18 of the Vienna Convention on the Law of Treaties, signatories to a treaty are legally bound to it. The Comprehensive Nuclear-Test-Ban Treaty is no exception: that is, signatories and ratifiers are all legally bound not to conduct a nuclear test explosion. Still, efforts to promote its entry into force

are important, especially in regard to delegitimizing nuclear testing by the Democratic People's Republic of Korea. In addition, States should ensure sufficient funding for maintaining and improving the international monitoring system of the Comprehensive Nuclear-Test-Ban Treaty.

37. Commencing negotiation of a fissile material cut-off treaty as early as possible would be a significant step forward for multilateral nuclear disarmament. Considering the challenges encountered in attempting to negotiate a fissile material cut-off treaty in the framework of the Conference on Disarmament and the urgent need to find avenues for progress, like-minded countries could find some other venue in which to commence the negotiation. Other measures to improve accountability of fissile material stocks — and in particular military-usable fissile materials, which constitute some 85 per cent of global stocks — would be a useful step in this direction.

38. In addition to prominent but traditional measures, the following ideas are also worth further consideration as midterm multilateral efforts toward a minimization point, for example:

(a) Committing to restraint and possibly freezing of nuclear weapons development and modernization programmes;

(b) Promoting multilateral reductions of nuclear weapons as part of a global initiative to reduce force levels and the destructive power of nuclear weapons as a way to involve countries that have not undertaken reductions, accompanied by steps to maintain stability;

(c) Identifying additional steps to make reductions irreversible, such as unilateral but mutual dismantlement of nuclear warheads and disposition of weapons-grade plutonium and uranium;

(d) Restricting and/or banning certain types or categories of delivery vehicles.

3. Roles of nuclear weapons

39. Measures to reduce the roles of nuclear weapons have been widely proposed for many decades, including negative security assurances, no-first-use or sole-purpose declarations and de-alerting of nuclear forces. In Phase I, the Group did not thoroughly examine such concrete measures, instead focusing on whether, what and how those measures could be taken.

40. The Group, for example, raised hard questions that disarmers and deterrers should discuss and address so as to break the current impasse and achieve a common vision for a world without nuclear weapons, including, inter alia:

(a) What can be done to raise confidence that deterrence can be credibly maintained without actually using nuclear weapons. It may not be useful to say that weapons are for deterrence but not for use, for if one is not going to use the weapon, it is hard to see how it contributes to deterrence. By the same token, if a State declares that it is willing to use nuclear weapons and its interests are so threatened that it is determined to do so, it is hard to see what will deter it;

(b) Whether it is feasible to declare that nuclear weapons are only weapons of deterrence and can never be considered weapons of "war-fighting," or that deterrence and war fighting cannot exist separately;

(c) If disarmers say that it should/could never be permissible to use nuclear weapons, then what that means for the right of national self-defence;

(d) If deterrence fails and an adversary uses nuclear weapons when a State is still in the midst of hostility that threatens its vital interests, what would the threatened

State do. There is no evidence to suggest how nuclear-armed States might act in this situation to manage conflict after the use of nuclear weapons;

(e) If a State facing aggression concludes that it will lose a war that threatens its existence unless it (or its allies) uses nuclear weapons, whether disarmers say that the State is required to commit national suicide; whether there are non-nuclear threats today or on the horizon that cannot be deterred or defeated by means other than nuclear weapons;

(f) What can be done to resolve such threats, through diplomacy and other means;

(g) To what extent non-nuclear military capabilities can be alternatives to nuclear deterrence;

(h) What offensive and defensive military capabilities must be controlled, balanced or eliminated in order to make roles of nuclear weapons feasibly decreased by all nuclear-armed States. What methods could be developed to define whether and how cross-domain balances could be achieved.

41. Meanwhile, the Group emphasized the significance of accountability and responsibility that nuclear-armed States should take. In case of nuclear use, they should be legally and internationally responsible for any damage caused to the third parties.

42. Regarding issues of status and prestige associated with nuclear weapons, the existing de facto coincidence between nuclear-weapon State status (N5) and permanent membership of the Security Council (P5) remains problematic. Reform of the Security Council membership could alter any misguided perception that nuclear weapons are instruments of prestige, which could help reduce temptation to proliferate based on the desire for status.

4. Finding a middle ground

43. Finding and reaching a middle and/or common ground between disarmers and deterrers is indispensable for advancing nuclear disarmament. This task needs serious and consistent effort to establish a balance between seeking peace by deterring war and seeking peace through international legal regimes. The longstanding dispute over the way forward can only be addressed by reasoned discourse through face-to-face engagement, rather than unproductive finger pointing.

44. One possible fruitful avenue to reduce the gap between disarmers and deterrers would be to establish a common position that reliance on nuclear weapons is not an ideal option, even if one side believes that nuclear deterrence has brought more benefit than risk. For such an avenue to be productive, both sides must seek to restore confidence in a process based on consensus, while at the same time finding ways to ensure that the parties take responsibility for protecting the consensus principle from abuse.

45. Secondly, disarmers and deterrers should acknowledge that security concerns expressed by States that now rely on nuclear deterrence must be resolved, or at least redressed, if nuclear disarmament is actually to be pursued. By the same token, States that rely on direct or extended nuclear deterrence should address what can and should be done to limit risks of escalation that could cause humanitarian disaster. And advocates of nuclear prohibition should address how potential aggression can be deterred and defeated without recourse to nuclear weapons.

46. Thirdly, disarmers would demand that nuclear-armed States and allies explain their legal accountability for using nuclear weapons if they argue that they face threats in which they need to depend on nuclear deterrence. From a disarmers' viewpoint,

deterrers have not necessarily addressed those issues explicitly. Disarmers would call on deterrers to show what they are doing to demonstrate that their use of nuclear weapons will not actually pose a humanitarian disaster: on what basis anyone should have confidence that, once nuclear weapons are used in a conflict involving two nuclear-armed adversaries, the conflict will not escalate to the point of humanitarian disaster.

47. Fourthly, they could discuss how deterrence for and/or norms on preventing use of nuclear weapons can play a role in promoting nuclear disarmament. The common enemy may not necessarily be nuclear weapons, per se, but nuclear use. A world without nuclear weapons is not today's world minus nuclear weapons. It is a fundamentally transformed world in which States and other actors do not feel the need to possess nuclear weapons and therefore have dismantled the means to do so. Meanwhile, the important task must be to manage the existing world so as to reduce the risk of use, with its devastating consequences. In order to deepen the understanding of the humanitarian risks of nuclear weapons, visits to Hiroshima and Nagasaki could be an important starting point for such recognition.

48. Fifth, regarding the Treaty on the Prohibition of Nuclear Weapons, countries opposing it need to explain reasons why they are not able to join and propose much more concretely how to make progress on nuclear disarmament. At the same time, proponents and opponents could jointly consider, inter alia, what to do after the Treaty on the Prohibition of Nuclear Weapons enters into force: what kind of steps to be defined and promoted under the Non-Proliferation Treaty regime and also under the Treaty on the Prohibition of Nuclear Weapons regime; and how they could design a verifiable and enforceable nuclear disarmament regime. These issues could be discussed at the review conferences of the Non-Proliferation Treaty and/or Treaty on the Prohibition of Nuclear Weapons, or other forums.

49. Lastly, engaging with civil society and academia is essential to advance nuclear disarmament and non-proliferation. Increasing efforts to educate and inform citizens, especially the younger generation, about the various dimensions of nuclear weapons serve to construct a firm basis for valuable discussions.

5. Regional issues

50. Regarding regional nuclear issues, the key driver for nuclear weapons acquisition (as opposed to mere nuclear temptation) remains the combination of the perception of an existential threat and of the absence of a credible security guarantee. Whether real or imagined, addressing such threats is the key to disarmament. Therefore, vital efforts should be directed at unresolved political problems and to bring parties to the negotiating table. Track 1 and track 1.5 processes should encourage regional talks and strengthen confidence-building measures. In addition, States in key regions should consider: creating inter-regional dialogue mechanisms for nuclear disarmament and non-proliferation; inviting States which have renounced the nuclear option to speak about their experiences; developing interregional talks to share experiences on addressing regional security and nuclear challenges, including how to minimize negative implications of a regional security environment for the Non-Proliferation Treaty regime. In this regard, sustaining the international nuclear non-proliferation regime is essential to resolving regional security challenges.

C. Long term: envisioning global security without nuclear weapons

51. Reaching a minimization point could be a useful step toward disarmament, but it is not an ultimate objective and there would remain very difficult issues that must be resolved to achieve a world without nuclear weapons. In this regard, the Group

considers it of value to explore a model of what a sufficient nuclear disarmament regime would entail. What needs to be dismantled? What facilities and capabilities would need to be eliminated, or placed under international monitoring? How would verification be accomplished? And how would disarmament be enforced?

1. International system

52. Firstly, it is necessary to contemplate under what international security system total elimination of nuclear weapons could be achieved and how the system should be maintained and bolstered after realization of the elimination of nuclear weapons. Advocates of nuclear disarmament should give greater thought to an after-nuclear world, what that world would look like, and how deterrence would work without the existence of nuclear weapons.

2. Verification

53. Secondly, the further nuclear weapons are reduced, the more important monitoring and verification for nuclear disarmament will become in order to maintain the confidence of the international community, to detect non-compliance, and to enforce obligations. This will require credible mechanisms to verify nuclear disarmament. Intensified research on nuclear disarmament verification is needed to develop robust approaches.

54. At the same time, however, nuclear disarmament verification cannot rely solely on technology. Other complementary mechanisms, such as personnel exchanges, will be necessary to mitigate concerns about intrusiveness and espionage associated with potential misuse of monitoring and verification technology.

3. Enforcement

55. Enforcement after detecting non-compliance is one of the most difficult issues in disarmament and non-proliferation. How to devise an enforcement mechanism in a world of sovereign States that will work to deter and, if necessary forcefully reverse violations of any disarmament agreement, remains a paramount and as yet unanswered question. Without establishing an effective enforcement mechanism, it would be very difficult, perhaps impossible, to achieve a world without nuclear weapons.

56. In the current international system, there is no other mechanism besides the Security Council that can deal with the violation of nuclear disarmament treaties. However, it is unrealistic to expect that this mechanism may work for enforcing nuclear elimination obligations since the P5 is coincidentally the N5. Establishing a body for enforcement other than the Security Council would not be realistic if the P5 are not persuaded to support this. Nor is it reasonable to expect, at least for the foreseeable future, that the international community will acquire new technologies that could effectively neutralize the use of nuclear weapons. Achievement of cooperative security in which no country need be concerned about another's violation of nuclear disarmament obligations is similarly remote.